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09/560,722	04/28/2000	RONALD G PARKINEN	A0604	5247
35219 7590 01/02/2008 WESTERN DIGITAL TECHNOLOGIES, INC. ATTN: RENEE M. QUICK 20511 LAKE FOREST DR. E-118H LAKE FOREST, CA 92630			EXAMINER NGUYEN, HUY THANH	
			ART UNIT 2621	PAPER NUMBER
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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 22, 26-27, 29-31, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (6,311,011) in view of Sato et al (US 5,991,832) and Sasaki et al (6,430,363).

Regarding claim 22, Kuroda discloses a video recording system (Fig. 9) to record an external video data for a video program segment selected using an electronic program guide (Figs 12-16, the video recording system comprising:

a user interface (809, Fig. 9) that receives user input;

a video input interface (801) that receives the external video data for the selected video program segment;

an interface connectable to an external disc drive (821-823); and

a video data management system that:

uses the electronic program guide to select the video program segment in response to the user input and to control playback commands of the video data management system (column 11, lines 1-45);

recognizes connection of the external disc drive to the video recording system and subsequently identifies the external disc drive as available for video data storage (Figs. 8 and 22);

uses the external video data for the video program segment to provide video data (column 11, lines 1-45); and

selects at least a portion of the video data to be routed to the external disc drive on the user input, an electronic program guide, and information regarding the storage capacity of the external disc drive (column 11, lines 1-45).

routes the selected portion of the video data to be routed to the external hard disc drive via the isochronous interface in order to record the external video data for the video program segment (column 11, lines 1-45).

Kuroda fails to teach the external disc drive is a hard disc drive. However it is noted that using a hard disc drive as an alternative medium for recording a video stream is well known in the art as taught by Sasaki (See Sasaki column 1, line 50 to column 2, line 7). Therefore it would have been obvious to one of ordinary skill in the art

to modify Kuroda with Sasaki by using a hard disc drive as taught by Sasaki as an alternative to the disc drive of Kuroda for storing the video data .

Kuroda fails to specifically teach that the interface connectable to the disc drive is an isochronous interface . However, it is noted that using an isochronous interface that is connectable between a video system and an external disc drive is well known in the art as taught by Sato. Therefore it would have been obvious to one of ordinary skill in the art to modify Kuroda with Sato by providing a isochronous interface that is connectable between the video system and external disc drive of Kuroda to improve the speed transmitting the video data between the video system and hard disc drive as that doing in the prior art . medium is a hard disc drive as a storage means for storing the video information .

Kuroda as modified with Sasaki further teaches that playback commands are usable while the external video stream being recorded (See Sasaki column 1, line 50 to column 2, line 7) . Sasaki teaches that during recording video stream (writing the video stream on a hard disc), the user can use a playback command to play (reading the recorded video stream from the hard disc) the recorded video stream .

Regarding claim 26, Kuroda further teaches a personal video recorder (821,822) that receives the external video data stream (Fig. 9).

Regarding claim 27, Kuroda further teaches the personal video recorder comprises an internal rotating storage drive (Fig. 22, column 5, lines 10-15, column 8, lines 20-25).

Regarding claim 29, Kuroda further teaches the video data management system automatically recognizes connection of the external rotating storage drive to the video recording system Fig. 28, column 5, lines 25-40).

Regarding claim 30, Kuroda as modified with Sato further discloses the interface comprises an isochronous interface which is compatible with the IEEE 1394 standard (See Sato, col. 6, lines 57-60).

Regarding claim 31, Kuroda as modified with Sato discloses the claimed wherein the external video data stream and streaming video data include video data and audio data (See Kuroda , col. 1, lines 5-10).

Regarding claims 34 and 38, Kuroda further teaches using a internal hard disc drive for storing the video stream (column 5, lines 10-15).

Method claim 35 is rejected for the same reasons as discussed in the corresponding apparatus claim 22 above.

Regarding claim 39, Kuroda as modified Sato et al and Sasaki et al further teaches routing the portion of the streaming video data to the external hard disk drive when the storage capacity of the internal hard disk drive is insufficient to accommodate the anticipated size of the portion of the streaming video data to be recorded (See Kuroda Figs. 3,5 and 6).

3. Claims 23-24, 32-33, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (6,311,011) in view of Sato et al (US 5,991,832) and Sasaki

et al (6430363) as applied to claims 22 and 35 above, and further in view of Hedricks et al (US 5,990,927).

Regarding claim 23, the proposed combination of Kuroda , Sato et al and Sasaki discloses all the claimed limitations as discussed in claim 22 above except for providing a set-top box that receives the external video data stream from a multiple-service operator.

Hendricks et al teaches a set top box (col. 3, lines 26-35) having user friendly interface for subscribers to access television programs (col. 2, lines 4859). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the set top box as taught by Hendricks et al into Sato et al's system in order to facilitate the capability of access to hundreds of television programming options.

Regarding claim 24, Hendricks et al also teaches that the set-top box comprises an internal hard disk drive (col. 15, lines 23-33).

Regarding claim 32, Hendricks et al teaches the claimed wherein the video data management system further comprises a video data encoder that encodes at least a portion of the streaming video data (col. 10, lines 26-29). Regarding claim 33, Hendricks et al further teaches a video data encrypter (col. 9, lines 29-30) that encrypts video data to prevent unauthorized user accessing the video signal.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video data encrypter as taught in Hendricks et al

into Kuroda as modified with Sato system in order to prevent unauthorized user accessing the video signal.

Method claim 36 is rejected for the same reasons as discussed in the corresponding apparatus claim 32 above.

Method claim 37 is rejected for the same reasons as discussed in the corresponding apparatus claim 33 above.

4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (6,311,011) in view of Sato et al (US 5,991,832) and Sasaki et al (6430363) as applied to claim 27 above, and further in view of Carroll et al (US 6,016,507).

The proposed combination of Kuroda, Sasaki and Sato et al discloses all the claimed limitations as discussed in claim 6 above except for providing wherein the internal rotating storage drive is an internal hard disk drive comprising an IDE interface.

Carroll et al teaches a well known IDE hard disk 82 (col. 4, lines 23-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known IDE hard disk as taught by Carroll et al into Kuroda as modified with Sato and Sasaki system in order to increase storage capacity.

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (6,311,011) in view of Sato et al (US 5,991,832) and Sasaki et al (6430363) and Hendricks et al (US 5,990,927) as applied to claim 24 above, and further in view of Carroll et al (US 6,016,507).



The combination of Kuroda, Sato et al, Sasaki et al and Hendricks et al discloses all the claimed limitations as discussed in claim 24 above except for providing wherein the internal hard disk drive comprises an IDE interface. Carroll et al teaches a well known IDE hard disk 82 (col. 4, lines 23-37).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known IDE hard disk as taught by Carroll et al into modified Kuroda's system in order to increase storage capacity.

### ***Response to Arguments***

6. Applicant's arguments filed 17 October 2007 have been fully considered but they are not persuasive.

Applicant argues that Kuroda as modified with Sasaki does not teach "playback commands are useable while the external video stream being recorded. In response the examiner disagrees. It is noted that Kuroda as modified with Sasaki further teaches that playback commands are usable while the external video stream being recorded (See Sasaki column 1, line 50 to column 2, line 7). Sasaki teaches that during recording video stream (writing the video stream on a hard disc), the user can use a playback command to play (reading the recorded video stream from the hard disc) the recorded video stream.

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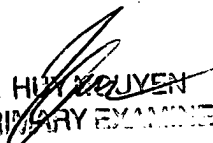
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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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H.N

  
HUY T. NGUYEN  
PRIMARY EXAMINER